



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application: Jung-Fu Cheng  
Serial No.: 10/624321  
Filed: July 22, 2003  
For: **Adaptive Hybrid ARQ Algorithms**

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT**

In accordance with 37 C.F.R. 1.56, counsel wishes to make of record the attached items of information for the Examiner's consideration in connection with this application. This IDS is submitted before the first Office Action, and thus no fee should be due. Also enclosed is a form PTO-1449 for the Examiner's convenience in making such consideration of record. Inclusion herein of any particular item of information is not to be construed as an admission that same is prior art.

**The Commissioner is hereby authorized to charge any fees that may be required or credit any overpayment to Deposit Account 18-1167.**

Respectfully submitted,

David E. Bennett  
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Date: September 23, 2003  
File No.: 4015-5072

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**CERTIFICATE OF MAILING**

I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAIL, IN AN ENVELOPE ADDRESSED TO: MAIL STOP PATENT APPLICATION, COMMISSIONER FOR PATENTS, BOX 1450, ALEXANDRIA, VA 22313-1450 ON September 23, 2003

Name of Depositor Kathleen Koppen

Signature

Date of Signature

9/23/03



FORM PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION PURSUANT TO  
37 CFR §1.97 & 1.98**

Docket Number:	Serial Number:
4015-5072	10/624,321
Applicant:	
Jung-Fu Cheng	
Filing Date:	Group:
July 22, 2003	

U. S. PATENT DOCUMENTS

Examiner	Patent No.	Date	Name	Class	Subcl	If Approp.	Filing Date
Initial							

FOREIGN PATENT DOCUMENTS

Patent No.	Date	Name	Class	Subcl	Yes	No	Translation

OTHER DOCUMENTS (including author, title, date, pages, etc.)

A	K. Brayer, "Error Control Techniques Using Binary Symbol Burst Codes," <i>IEEE Trans. Comm. Tech.</i> , vol. 16, no. 2, pp. 199-214, April 1968.
B	D.M. Mandelbaum, "An Adaptive-Feedback Coding Scheme Using Incremental Redundancy," <i>IEEE Trans. Info. Theory</i> , vol. 20, no. 3, pp. 388-389, May 1974.
C	J.J. Metzner, "Improvements in Block-Retransmission Schemes," <i>IEEE Trans. Comm.</i> , vol. 27, no. 2, pp. 524-532, Feb. 1979.
D	D. Chase, "A combined coding and modulation approach for communication over dispersive channels," <i>IEEE Trans. Comm.</i> , vol. 21, no. 3, pp. 159-174, Mar. 1973.
E	P. Frenger, S. Parkvall, and E. Dahlman, "Performance comparison of HARQ with Chase combining and incremental redundancy for HSDPA," <i>Proc. IEEE VTC '01</i> , pp. 1829-1833, Oct. 2001.
F	F. Frederiksen and T.E. Kolding, "Performance and modeling of WCDMA/HSDPA transmission/H-ARQ schemes," <i>Proc. IEEE VTC '02 Fall</i> , Sep. 2002.
G	Texas Instruments, "Performance comparison of bit level and symbol level Chase combining," 3GPP input document R1-01-0472.
H	Panasonic Corp., "Enhanced HARQ method with signal constellation rearrangement," 3GPP input document R1-01-0237.
I	Shu Lin and Daniel J. Costello, Jr., "Error Control Coding Fundamentals and Applications," Prentice-Hall Computer Applications in Electrical Engineering, 1982, pp. 456-497.
J	"3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Multiplexing and channel coding (FDD)" (Release 5), 3GPP TS 25.212, v5.0.0, 2002-03.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation not in conformance and not considered. Include copy of this form with next communication to the applicant.